Data sheet HP recommends Windows.

HP t820 Flexible Thin Client

Ignite your IT environment with HP's most powerful thin client.

HP's most powerful thin client with quad-core processors gives you powerful graphic processing at your fingertips. Get a responsive voice and video desktop experience in a virtualized environment. You can choose from either dual- or quad-core Intel® 4th Generation high performance processors.[1] Robust security options deliver more reliable data protection. Save money and get control of your IT environment with remote management in a Windows Embedded environment. HP t820 supports up to seven displays,[2] giving your users more options for high-end graphic processing.

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Fast or faster—your choice.

Get ultimate performance with your choice of dual-or quad-core processors. With an ever changing user environment and a broad range of end-user requirements, you choose which processor is right for the job.

The Intel® Core™ i5 processor delivers accelerated graphic rendering and multimedia.[1] When demanding applications need strong performance and a seamless multimedia experience choose the Intel® Pentium® processor.[1]

Keep business classified.

Help keep your business data safe—lock down sensitive information and meet compliance standards with robust encryption and security options, including 100 Mbps SCFiber NIC, Trusted Platform Module (TPM) authenticates the thin client at pre-boot for enhanced security when logging onto their protected network.

With Intel® vPro™* technology,[3,9] you get management features such as remote access to the PC (including monitoring, maintenance, and management) independent of the state of the operating system (OS) or power state of the PC, and security features.

The versatility of virtual.

Accelerate network connectivity and streaming applications in densely populated work environments with integrated HP Velocity – it reacts to changing network conditions to maintain high-quality performance.

Count on a seamless IT experience with the flexibility of a multi-protocol environment – Citrix, Microsoft, VMware or HP Remote Graphics Software.[4]

Business productivity.

Outstanding multi-tasking efficiency. Expand up to seven monitors[2] to seamlessly control large amounts of data and multiple applications—without reconfiguring open windows.

Don't stop with the thin client. Create a complete solution that's supported by HP. Choose from a full suite of HP displays, accessories, and software.

Realize real savings while reducing operating expenses. From less downtime and fewer automatic updates to decreased hardware and operating costs – it adds up to a lower total cost of ownership.

Manageability.

Make your life easier to manage. It won't cost you a dime extra, but it is the key to effectively manage thin clients. With just one software you can do it all—track, configure, upgrade, clone, and manage up to thousands of thin client devices.

Supported by HP.

Protect your investment with a 3-year worldwide limited warranty – select optional HP Care Packs which are optional service contracts that extend your protection beyond the standard warranty.[5]

Create a complete solution that's supported by HP. Choose from a full suite of HP displays, accessories, and software.

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Specifications

Operating Systems[6]	Windows 7 Professional 32-bit* Windows 7 Professional 64-bit* Windows 8 Pro 64-bit**
Chipset	Intel® Q87 Express
Processor	Intel® Core™ i5-4570S Processor; Intel® Pentium® Processor[1]
Storage	SATA Solid State Drive, 16 GB7 MLC mSATA 6.0 Gb/s, 32 GB7 MLC mSATA 6.0 Gb/s
Memory[7]	DDR3 non-ECC Up to 1600 MT/s, 16 GB, 2 SODIMM
Networking/Communications[8]	Ethernet (RJ-45): Intel 82579LM Gigabit Network Connection (standard) Wireless: Intel® Centrino Advanced-N 6205 PCI Express Mini Card Wireless Network Connection (optional);[9] Fiber NIC (optional 100 Mbps SC)
Audio/Multimedia[10]	HD audio with Realtek ALC221 codec (all ports are stereo), Microphone** and headphone front ports (3.5mm), Line-out and Line-In rear Ports** (3.5mm), Multi-streaming capable,** Internal Speaker (standard).
Display support[4]	Maximum number of simultaneous displays: 4 DisplayPort Multistreaming and HBR2 supported. DisplayPort Audio supported for one audio stream. 7 x 1920x1080 or 4 x 2560x1600
Security	Trusted Platform Module (TPM) 1.2, SATA port disablement (via BIOS), Drive lock, USB enable/disable (via BIOS), Optional USB Port Disable at factory (user configurable via BIOS), Removable media write/boot control, Power-On password (via BIOS), Setup password (via BIOS), Hood Sensor (case intrusion detection), Support for chassis padlocks and cable lock devices
Power	High efficiency, Integrated graphics: 135 W 87% efficient active PFC Discrete graphics: 180 W 87% efficient active PFC
Environmental and Regulatory	ENERGY STAR® qualified models available, EPEAT® registered where applicable/supported. See epeat.net for registration status by country. Low Halogen[11] (chassis, all internal components and modules), TAA compliant
Ports and connectors	USB 2.0: 4 each (front), 2 each (rear); USB 3.0: 4 each (rear), Video[12]: 1 each VGA and 2 each DislayPort 1.2 (for integrated dual digital monitor support), Audio: Front – microphone & headphone Rear – line input, line out. All ports are 3.5mm in diameter. NIC: 1 each RJ-45
Dimensions	66 x 252 x 254 mm
Weight	6.8 lb (3.1 kg)
Warranty	3-year standard on-site warranty and service: This limited warranty and service offering delivers parts, labor and on-site repair. Optional terms available up to 5 years. Response time is next business day and includes free telephone support 24 x 7. Global coverage ensures any product purchased in one country and transferred to another non-restricted country will remain fully covered under the original warranty and service offering. Some countries/regions do not offer one-year onsite and labor.

HP recommends Windows.

Software specifications

Host environment	Protocols	WES8	WES7E	WES7P
Microsoft Remote Desktop Services	RemoteFX (RFX)	•	•	•
	RDP	8	8	8
Citrix	ICA	3.3	3.3	3.3
	HDX	•	•	•
VMware Horizon View	RDP	5.2	5.2	5.2
	PCoIP	5.2	5.2	5.2
Protocol Clients				
Citrix Online Plugin		13.3	13.3	13.3
HP Teem Talk Terminal Emulator		7.3	7.3	7.3
Browser Support				
Internet Explorer		10	9	9
Security				
Smart Card		•	•	•
Logon Manager		•		•
Read-only Operating System		•	•	•
802.1x		•	•	•
Enhanced/Unified Write Filter (EWF/UWF)		UWF	EWF	EWF
File-based Write Filter (FBWF)			FBWF	FBWF
Microsoft Firewall		•	•	•
Session brokers				
VMware Horizon View		5.2	5.2	5.2
Legstream Desktop Connection broker			From vendor site	From vendor site

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Management Tools	WES8	WES7E	WES7P
HP Device Manager	•	•	•
HP Thin Slate	•	•	•
HP Easy Tools		•	•
Microsoft SCCM/EDM Agent		•	•
Additional Components			
HP Velocity	•	•	•
HP Connection Manager	•	•	•
Universal Print Driver	•		•
Windows Media Player	12	12	12
Viewers for MS Office 2003: Excel, PowerPoint, Word		•	•
Windows touch (multi-touch support)	• (Advanced)		• (Multi)
Multi-language support	•		•
Microsoft DirectAccess[13]	Via VL		•
Microsoft BranchCache[13]	Via VL		•
Microsoft AppLocker[13]	Via VL		•
Microsoft AntiMalware and Windows Defender	•		•
Imprivata OneSign***	•	•	•
HealthCast QwickAccess***	•	•	•
Audio CODECs included			
MP3	•	•	•
WMA stereo	•	•	•
AAC stereo & HE AAC			
Microsoft AC3 encoder	•	•	•
Microsoft Dolby audio decoder (AC-3, E-AC-3)	•		
Video CODECs included			
MPEG-1	•	•	•
MPEG-4 part 2 (DivX, Xvid, H.263)	•	•	•
MPEG-4 part 10 (H.264, AVC)	•	•	•
WMV 7/8/9 VC-1 & ASF Demuxer	•	•	•

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* Not all features are available in all editions of Windows 7. Systems may require upgraded and/or separately purchased hardware to take full advantage of Windows 7 functionality. See microsoft.com/windows/windows-7/ for details.

** Not all features are available in all editions of Windows 8. Systems may require upgraded and/or separately purchased hardware, drivers and/or software to take full advantage of Windows 8 functionality. See microsoft.com.

*** Optional features sold separately or as add on features.

1. Multicore is designed to improve performance of certain software products. Not all customers or software applications will necessarily benefit from use of this technology. 64-bit computing on Intel® architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers, and applications enabled for Intel 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. Intel's numbering is not a measurement of higher performance.
2. The t820 Flexible Thin Client is factory equipped to simultaneously support up to 3 monitors utilizing the on-board Intel® HD 4600 Graphics card with 1xVGA and 2x Display Port connectors. Expansion options include support up to 7 Full HD monitors (1920x1080), 6 WUXGA monitors (1920x1200), or 4 WQXGA monitors (2560x1600). Using 4 or more monitors require a factory-installed AMD Radeon HD 7560A expansion video card, and also requires one or more HP Display Port Multi-Stream Hubs, or Display Port 1.2 monitors with daisy-chain capabilities.
3. vPro is available with Core i5 processor ONLY. Not available on Pentium. Some functionality of this technology, such as Intel® Active management technology and Intel Virtualization technology, requires additional 3rd party software in order to run. Availability of future "virtual appliances" applications for Intel vPro technology is dependent on 3rd party software providers. Microsoft Windows required.
4. Remote Graphics Software requires Windows and Internet access.
5. Certain restrictions and exclusions apply. HP Care Pack Services extend service contracts beyond the standard warranties. Service levels and response times for HP Care Packs may vary depending on your geographic location. Service starts from date of hardware purchase. To choose the right level of service for your HP product, use the HP Care Pack Services Lookup Tool at hp.com/go/cpc. Additional HP Care Pack Services information by product is available at hp.com/go/cpc.
6. The HP t820 platform ships with WES7E included; please contact the HP account manager on WES8 and WES7P availability.
7. For systems configured with more than 3 GB of memory and a 32-bit operating system, all memory may not be available due to system resource requirements. Addressing memory above 4 GB requires a 64-bit operating system.
8. Either the integrated network connection or the Intel Centrino wireless NIC is required to support Intel vPro Technology features.
9. Wireless access point and Internet service required.
10. The front microphone port is re-taskable as a Line-in, Microphone-in or Headphone-out port. Rear audio input ports are re-taskable as a Line-in or Microphone-in port. External speakers must be powered externally. Multi-streaming can be enabled in the Realtek control panel to allow independent audio streams to be sent to/from the front and rear jacks. This allows for different audio applications to use separate audio ports on the system. For example, the front jacks could be used with a headset for a communications application while the rear jacks are being used with external speakers and a multimedia application.
11. This product is low halogen except for power cords, cables and peripherals, as well as the customer-configurable 100 Mbps Fiber NIC module which is not Low Halogen. Service parts obtained after purchase may not be Low Halogen.
12. When configured with an Intel Pentium only two of the available video output ports are active.
13. VL=Volume License

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